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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,666	09/25/2001	Rudolf Kodes	.1454.1079	6964

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EXAMINER

THANGAVELU, KANDASAMY

ART UNIT	PAPER NUMBER
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2123

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/889,666

Applicant(s)

KODES, RUDOLF

Examiner

Kandasamy Thangavelu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-7, 9, 11, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-7, 9, 11, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to the Applicants' Response mailed on November 7, 2006. Claims 1, 10, 12 and 13 were canceled. Claims 5, 9, 11 and 21 were amended. Claims 5-7, 9, 11, 20 and 21 of the application are pending. This office action is made non-final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. Claims 5-7, 9, 11, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Agrawal et al.** (U.S. Patent 6,278,977) in view of **Steinman** (U.S. Patent 6,324,495), and further in view of **Virtamo et al.** (U.S. Patent 5,503,249).

4.1 **Agrawal et al.** teaches Deriving process models for workflow management systems from audit trails. Specifically, as per claim 21, **Agrawal et al.** teaches a (processing) method (for an engineering activity) (Abstract, L1-9; CL2, L16-23), comprising:

modeling an engineering activity having a plurality of interrelated events with relationships defined between the events (CL2, L16-23; Fig. 4, Items A, B and C);

displaying the model of the engineering activity with all relationships being shown; and selecting a first event of the engineering activity using a graphical user interface (CL2, L16-23; Fig. 4; CL3, L24-29; CL9, L21-26);

preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity (CL2, L16-23; Fig. 4, Items A, B and C);

determining at least one third event of the engineering activity from the set of second events (Fig. 4, Item D, B and C; CL2, L18-23).

Agrawal et al. does not expressly teach preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship. **Steinman** teaches preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54). It would have been obvious to

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one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Agrawal et al.** with the method of **Steinman** that included connecting a first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship, because processing of an event can affect the state variables of the engineering system and can cause new events to occur in the future for one or more objects in the system; this interaction of cause and effect relationship requires that the new events generated be scheduled to occur at activity time later than current time (CL1, L48-54).

Agrawal et al. and **Steinman** do not expressly preparing at least one second connection to connect the at least one third event to the first event in a predecessor/successor relationship; and displaying the first event together with connections selected from the group consisting of the first connections and the at least one second connection, the first event and the connections being displayed without displaying any relationship unless the relationship is defined by a first or second connection. **Virtamo et al.** teaches preparing at least one second connection to connect the at least one third event to the first event in a predecessor/successor relationship; and displaying the first event together with connections selected from the group consisting of the first connections and the at least one second connection, the first event and the connections being displayed without displaying any relationship unless the relationship is defined by a first or second connection (Fig. 3, Move event to stop event, where stop event is the third event and move event is first event; pass event is the second event; open event to close event, where open event is the first event and close event is the third event; there can be another open event while the door is closing if a customer enters the car while it is closing; inherent in elevators is passenger deboard event as a first event; passenger board event as the second event; door close

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event as the third event; if there are no passengers waiting at the floor to board the car, the passenger deboard event will be followed by the third event, door close; CL2, L53 to CL3, L1; CL2, L65 to CL3, L1; CL3, L22-25; CL3, L34-39). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Agrawal et al.** and **Steinman** with the method of **Virtamo et al.** that included preparing at least one second connection to connect the at least one third event to the first event in a predecessor/successor relationship; and displaying the first event together with connections selected from the group consisting of the first connections and the at least one second connection, the first event and the connections being displayed without displaying any relationship unless the relationship is defined by a first or second connection, because that would allow efficiently operating the system in an optimal manner to ensure that the service offered to the customers was as efficient as possible; in elevators this would be minimization of average passenger waiting time (CL1, L16-21).

Per claim 5: **Agrawal et al.** teaches the events have a predecessor/successor relationship with respect to one another (CL8, L6-15; CL10, L40-47).

4.2 As per claims 6 and 7, **Agrawal et al.** and **Steinman** do not expressly that the first event precedes the third event in the predecessor/successor relationship; the third event succeeds the first event in the predecessor/successor relationship. **Virtamo et al.** teaches that the first event precedes the third event in the predecessor/successor relationship; the third event succeeds the first event in the predecessor/successor relationship (Fig. 3, Move event to stop event, where stop

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event is the third event and move event is first event; pass event is the second event; open event to close event, where open event is the first event and close event is the third event; there can be another open event while the door is closing if a customer enters the car while it is closing; inherent in elevators is passenger deboard event as a first event; passenger board event as the second event; door close event as the third event; if there are no passengers waiting at the floor to board the car, the passenger deboard event will be followed by the third event, door close; CL2, L53 to CL3, L1; CL2, L65 to CL3, L1; CL3, L22-25; CL3, L34-39).

Per claims 9 and 11: **Agrawal et al.** teaches that the events have associated information generated as results of the activities (CL3, L24-29; CL7, L57-59); and

the graphical representation is effected by means of actuation using a context-sensitive menu (CL3, L24-29; CL7, L57 to CL8, L5).

Per claim 20: **Agrawal et al.** teaches that the events have associated information, generated as results of the activities (CL11, L45-55).

Response to Arguments

5. Applicant's arguments with respect to 35 USC 103 (a) rejections filed on November 7, 2006 have been considered. Applicant's arguments with respect to 35 USC 103 (a) rejections are persuasive.

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5.1 As per the applicant's argument that "Claim 21 recites that the first event, together with the first and/or second connections are displayed without displaying any relationship unless the relationship is defined by a first or second connection; in Fig. 4 of Agrawal et al. unrelated connections are shown; if event A is selected, then the connections from events B and C to event D are unrelated; accordingly, Fig. 4 of Agrawal et al. does not satisfy the limitations of the claims; the events in Agrawal et al. are activities; claim 21 requires events to be connected in a cause and effect relationship", the Examiner has used a new reference **Virtamo et al.** together with **Agrawal et al.** and **Steinman**.

Virtamo et al. teaches preparing at least one second connection to connect the at least one third event to the first event in a predecessor/successor relationship; and displaying the first event together with connections selected from the group consisting of the first connections and the at least one second connection, the first event and the connections being displayed without displaying any relationship unless the relationship is defined by a first or second connection (Fig. 3, Move event to stop event, where stop event is the third event and move event is first event; pass event is the second event; open event to close event, where open event is the first event and close event is the third event; there can be another open event while the door is closing if a customer enters the car while it is closing; inherent in elevators is passenger deboard event as a first event; passenger board event as the second event; door close event as the third event; if there are no passengers waiting at the floor to board the car, the passenger deboard event will be followed by the third event, door close; CL2, L53 to CL3, L1; CL2, L65 to CL3, L1; CL3, L22-25; CL3, L34-39).

Agrawal et al. does not expressly teach preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship. **Steinman** teaches preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K. Thangavelu', with a stylized flourish at the end.

K. Thangavelu
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December 19, 2006